

Applicant



OCTOBER 2011

SR 46 Widening and Reconstruction and Realignment Project – Wekiva Parkway

TIGER Discretionary Grant Application

APPLICATION INFORMATION:

Type of Application: Highway

Location: State of Florida; Lake, Orange and Seminole Counties
and within Florida's 7th, 3rd and 24th Congressional Districts

Urban Area: Orlando

Amount Requested: \$21,920, 311



Florida Department of Transportation

RICK SCOTT
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ANANTH PRASAD, P.E.
SECRETARY

October 27, 2011

The Honorable Ray LaHood
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Subject: TIGER III Discretionary Grant Application for the SR 46 Widening and Reconstruction and Realignment – Wekiva Parkway

Dear Secretary LaHood:

As you and your staff at the U.S. Department of Transportation review the applications for Transportation Investment Generating Economic Recovery (TIGER III) Discretionary Grant funding, I respectfully urge your strong consideration for this application.

The Florida Department of Transportation (FDOT), in coordination with the Orlando-Orange County Expressway Authority, Florida Turnpike Enterprise, and Central Florida regional transportation partners, is pleased to submit this application for the SR 46 Widening and Reconstruction and Realignment – Wekiva Parkway project.

The project will include 23 centerline miles of new toll expressway that will complete the Western Beltway around the Orlando metropolitan area. The Wekiva Parkway is designated as a Strategic Intermodal System (SIS) highway. SIS roads and highways carry more than 90% of the State's high economic impact traffic for freight and tourism as well as commuters. Furthermore, this project will help create the conditions for private sector job creation and private sector investment in our State's economy.

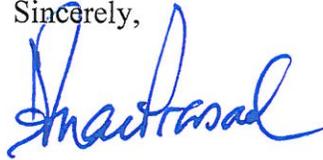
The project will also include non-toll roadway improvements such as a 1.87 mile segment of SR 46 in Seminole County, Florida, between Interstate 4 and SR 429 (Segment 7B) which will assist local commuters and freight access the completed beltway.

The Wekiva Parkway project is estimated to cost \$1.9 billion. The TIGER III funds will be applied to the first phase of the project, Segment 7B, which will be constructed within existing right-of-way and is estimated to cost approximately \$21.9 million. Project design is currently underway with construction scheduled to begin in July 2012. Obtaining this grant will complete the funding gap for this much needed project.

The Honorable Ray LaHood
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Thank you for your consideration of this application and project. Should you or your staff have any questions or need additional information, please contact Noranne Downs, P.E., District Five Secretary, at (386) 943-5474 or e-mail noranne.downs@dot.state.fl.us.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ananth Prasad". The signature is fluid and cursive, with the first name "Ananth" being more prominent than the last name "Prasad".

Ananth Prasad, P.E.
Secretary

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The highlights of this project application include the following:

- **One of the three highest priority projects of FDOT** statewide – emerged from coordinated statewide, regional, and local planning processes.
- **Aligns with the long-term growth vision** of the region and is anticipated to play an important role in shaping the future as the regional transportation partners continue to work towards gleaming a vision for advancing the global competitiveness and enhancing the quality of life of Central Florida.
- Has been added to the Florida Strategic Intermodal System (SIS) which is the **backbone of the state economy** and is in the process of being added to the National Highway System (NHS).
- **Aligns perfectly with all primary and secondary selection criteria** included in the Notice of Funding Availability - Segment 7B, for which TIGER Discretionary Grant funds are being sought, demonstrates **independent utility**.
- Provides the much needed **missing connection for freight traffic** in the region accessing major facilities of **statewide economic significance** like the Orlando-Sanford International Airport, Port Canaveral, Orlando International Airport, and other existing SIS hubs.
- Has anticipated benefits in travel time savings for automobile users (residents and tourists) of **over \$1.5 billion** over a 20 year period.
- **Non-Federal match (78.5%) is well above the minimum match requirement** and the TIGER Discretionary Grant funding will be utilized to **complete an overall financing package**.
- Leverages public dollars to entice **significant private investment** (over \$500 million – 26% of project cost).
- Unique stakeholder coordination and **sustainable innovative design** minimizes impacts to the Wekiva River Basin resources and also **improves wildlife habitat connectivity** between conservation lands and **increases safety** by reducing vehicle-wildlife conflicts.
- Most of the Parkway is **located in an Economically Distressed Area** and is anticipated to **enhance livability** and **generate near-term and long-term jobs** in the region.
- Expected to **yield over two times the benefits than the cost** incurred by the society over a 20 year horizon.
- Is supported by transportation partners, non-transportation entities, elected officials and citizens around the State.
- Project is **ready to proceed** immediately after discretionary grant is received. Finding of No Significant Impact (FONSI) is expected by December 2011. Construction is scheduled to begin in July 2012.
- FDOT and partners are **committed** with financial and technical capacities to make this project a success.

Coupled with investments from other project partners, this Federal investment will help to create much-needed jobs and have a profound long-term impact on regional mobility in Central Florida.

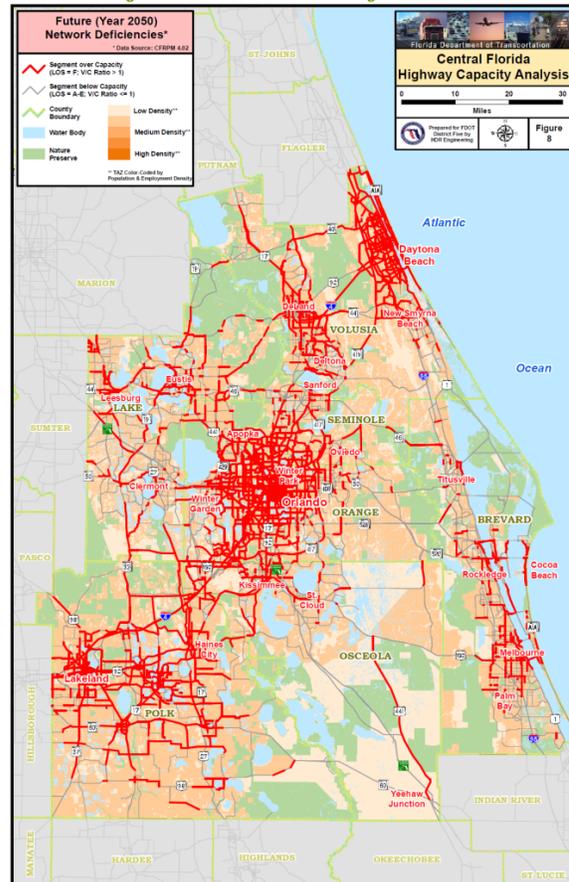


B. PROJECT DESCRIPTION

The Wekiva Parkway project has long been planned for the Central Florida region, first appearing in local transportation plans more than 40 years ago. Authorized in 2004 by the Florida legislature in the Wekiva Parkway and Protection Act, the 27-mile parkway will complete the Western Beltway around metropolitan Orlando and provide an alternative travel route to Interstate 4, a heavily utilized corridor through the State by commuters, tourists, and freight traffic. The Parkway is anticipated to improve safety conditions of the surrounding network, particularly along SR 46, one of the deadliest roads in Florida for both people and wildlife. Its unique design will minimize impacts to Wekiva River Basin resources while also improving wildlife habitat connectivity between conservation lands and reducing vehicle-wildlife conflicts.

As the fourth largest and one of the fastest growing states in the nation, Florida is facing the challenges of increasing transportation demands and diminishing funding sources. Tremendous growth of people and goods over the last decade has put immense pressure on the transportation infrastructure. The Central Florida region has long drawn tourism and business economy into the State. When coupled with the travel demand of the local residents, the highway system is often over-worked and greatly congested. In 2006/07, the FDOT and other regional partners in coordination with MyRegion.org conducted a study called “How Shall We Grow.” The study revealed an eye opening reality of how congestion would grow in Central Florida if current growth trends continue. It also indicated huge potential transportation infrastructure improvement needs and identified facility constraints that would deter infrastructure improvements, in addition to funding shortfalls. Figure 2 shows the anticipated network deficiencies in Central Florida by the year 2050. The underlying message for the regional and local partners is to consider the consequences of land use decisions on the future transportation system, and vice-versa, and work collaboratively towards sustainable transportation solutions. Development of alternate travel paths, like the Wekiva Parkway corridor, is one of the key strategies to reduce congestion and provide connectivity of other regions to the urban core. This will enhance regional mobility and connections within the Orlando metropolitan area. The Western Beltway

Figure 2: Central Florida Year 2050 Projected Network Deficiencies



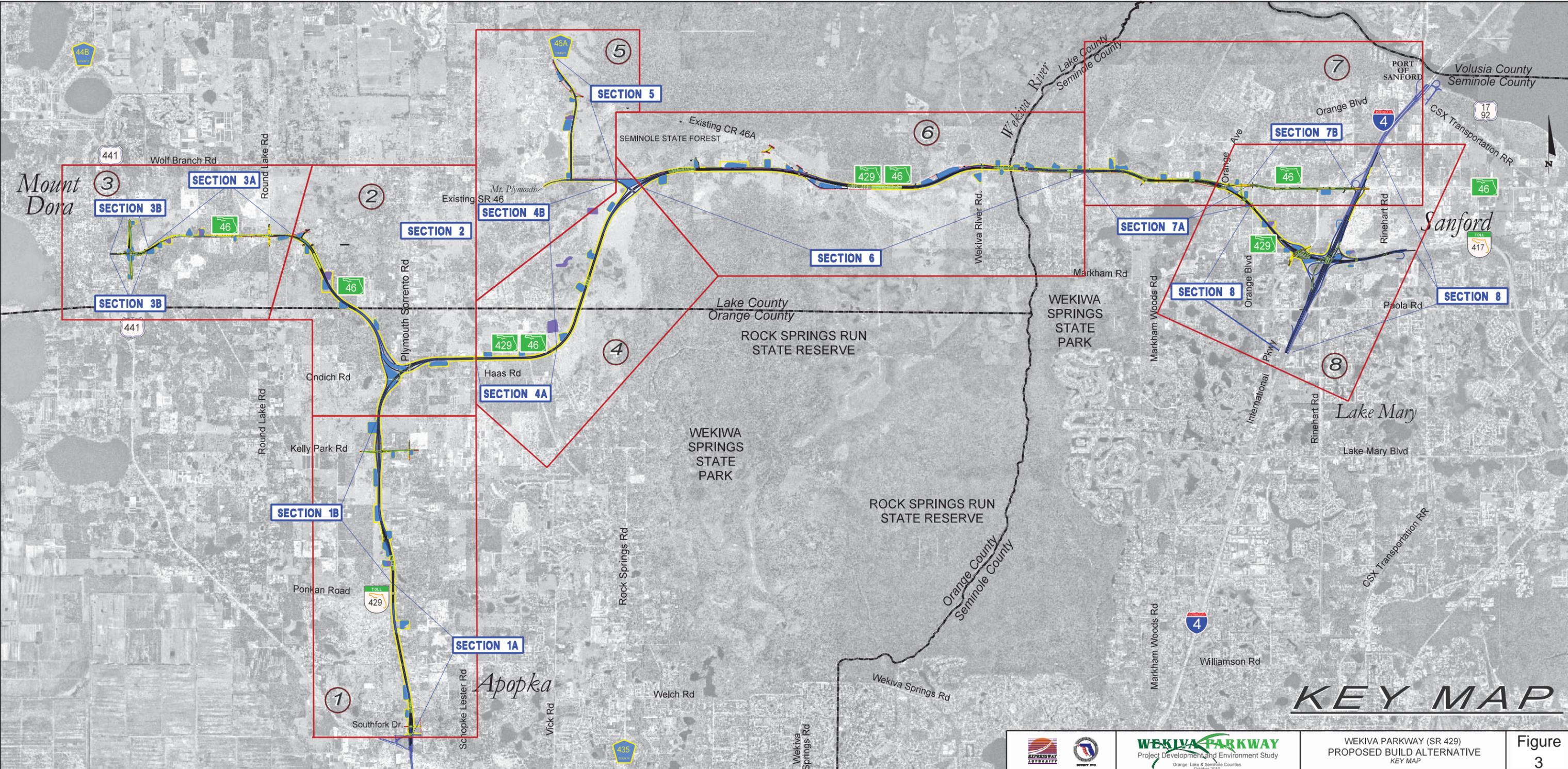
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will provide faster travel options to commuters, tourists, and commercial vehicles around Orlando and thereby divert vehicles from the congested facilities. The project aligns with the long-term growth vision of the region and is anticipated to play an important role in shaping the future transportation network as the regional transportation partners continue to work towards gleaming a vision for advancing the global competitiveness and enhancing the quality of life of Central Florida. More information about the “How Shall We Grow” study, including the partners involved, can be found on www.myregion.org under Regional Vision.

Partly due to the environmentally sensitive nature of the surrounding geography, the Wekiva Parkway is an expensive undertaking – expected to cost approximately \$1.9 billion over eight years. Its alignment cuts through the Wekiva River Basin, an environmentally sensitive area which the FDOT and the community want traversed very carefully and with limited negative impacts. Through active communication with partners and stakeholders, the project incorporates several “green” components to minimize impacts to the environment.

The Wekiva Parkway project is broken down into eight segments for the purposes of design and construction as shown in Figure 3. Funding for most of the project has been identified through a public-private partnership with the FDOT, Florida’s Turnpike Enterprise, and Orlando-Orange County Expressway Authority (OOCEA). The requested TIGER Discretionary Grant funds will close the remaining funding gap and allow this significant investment to begin. The TIGER Discretionary Grant will be used to start the Wekiva Parkway project with the construction of Segment 7B, which provides a 1.87 mile 6-laned divided controlled access facility from the Wekiva Parkway to the SR 46 / Interstate 4 interchange. The interchange is a heavily congested connection of roadways that are critical to local and regional freight hauling, as well as local residential commuting traffic. The construction of Segment 7B will not require the acquisition of additional right-of-way and can start construction by obligating the TIGER Discretionary Grant funds well before the September 30, 2013 statutory deadline. The widening of Segment 7B from four to six lanes will alleviate congestion, improve the safety conditions along the existing corridor, and align with all primary and secondary criteria of the discretionary program.

The Wekiva Parkway has also been added to Florida’s Strategic Intermodal System (SIS), an integrated transportation network consisting of statewide and regionally significant transportation facilities, services, modes of transportation, and linkages. The SIS was adopted into Florida law in 2003 and established to efficiently serve the mobility needs of Florida’s citizens, businesses, and visitors; and help Florida become a worldwide economic leader, enhance economic prosperity and competitiveness, enrich quality of life, and reflect responsible environmental stewardship. The current designated SIS is a network of high-priority transportation facilities which includes the State’s largest and most significant commercial service airports, the spaceport, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, waterways, and highways. Additionally, the SIS carries more than 99 percent of all commercial air passengers and cargo, virtually all waterborne freight and cruise passengers, almost all rail freight, 89 percent of all interregional rail and bus passengers, 55 percent of total traffic and more than 70 percent of all truck traffic on the State Highway System. The State formed this network in an effort to assist in focusing limited resources to ensure this critical network stays up and running. Additionally, an application is underway to add the Wekiva Parkway to the National Highway System (NHS). The Eastern Beltway around Orlando is already designated as a NHS facility.



KEY MAP

1. LOCATION

The project is located in Florida, specifically northeast Orange County and also traverses through Lake and Seminole Counties. Segment 7B is located in Seminole County in its entirety. As shown in Figure 3, the Wekiva Parkway is shaped similar to a sideways “Y” alignment. The corresponding latitude and longitude coordinates to these endpoints are as follows:

- LAT. 28.7968839412, LONG. -81.6284525441 (Segment 3B)
- LAT. 28.6970184301, LONG. -81.5566401498 (Segment 1A)
- LAT. 28.8113261501, LONG. -81.3357156841 (Segment 7B)
- LAT. 28.7989396677, LONG. -81.3248428453 (Segment 8)

The roadway mileposts for the project are as follows:

- SR 429 Milepost 0.000 to Milepost 8.170 in Orange County
- SR 46 Milepost 0.000 to Milepost 3.951 in Lake County, Milepost 0.000 to Milepost 0.775 in Orange County, Milepost 3.257 to Milepost 5.132 in Seminole County
- SR 429 Milepost 0.000 to Milepost 7.371 in Lake County, Milepost 0.000 to Milepost 6.168 in Seminole County
- Realignment of CR 46A in Lake County from SR 46 to 0.04 miles north of Arundel Way

The Orlando-Sanford International Airport is located within 5 miles of the proposed project.

2. CHALLENGES THAT WILL BE ADDRESSED BY THE PROJECT

The Wekiva Parkway project is part of regional efforts and plans to maintain transportation facilities in the face of significant growth within the Central Florida region. Constructing this new facility will provide a system-to-system connection for regional mobility between the Eastern Beltway (SR 417), the Western Beltway (SR 429), and Interstate 4. Segments of Interstate 4 are currently carrying more than 200,000 daily vehicles and operating at a level of service (LOS) F. By completing the Western Beltway (SR 429) around metropolitan Orlando and providing a higher capacity east-west travel facility in east Lake County and west Seminole County, the Wekiva Parkway will alleviate congestion on Interstate 4, SR 417, SR 441, SR 434, SR 436, SR 414, and US 17-92, which in turn, is expected to reduce crash rates and enhance driver safety throughout the Central Florida area. The travel shed of this regionally significant facility encompasses an area beyond the three counties it traverses. Completion of the Western Beltway will allow regional traffic to bypass the most heavily congested segment of Interstate 4 (from south of the Osceola / Orange County line to south of the Seminole / Volusia County line) which travels through the City of Orlando and is the main thoroughfare providing access to Walt Disney World, Sea World, Universal Studios, and other area attractions. In addition to providing relief to regional motorists, the completed Western Beltway will ease congestion on local roadways and provide a needed expressway connection between northwest Orange, eastern Lake, and western Seminole Counties.

The anticipated widening of the Panama Canal offers an opportunity for significant expansion for east coast ports. The State is looking into developing intermodal transfer centers to assist with the increased demand of east coast ports in conjunction with the expansion of the Panama Canal.

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The current roadway network in the region, particularly to the west of the Orlando metropolitan area, is not adequate to meet a significant increase in freight traffic. The Wekiva Parkway will provide the much needed missing connection for freight traffic in the region accessing major facilities of economic significance like the Orlando-Sanford International Airport, Port Canaveral, Orlando International Airport, and other existing SIS hubs (refer to Figure 4). Improving the freight corridor west of the Orlando-Sanford Airport will relieve the commercial traffic on arterial and residential roads, as well as expand the capacity of local highways used by both commercial and personal vehicles. The results will be not only an improvement in the economic competitiveness of the goods movement industry, but also an improved quality of life for local residents.

Figure 4: Proximity of Wekiva Parkway to the Existing SIS Hubs



The other significant issue that the project promises to address is providing a major thoroughfare through an environmentally sensitive area while enhancing the environmental integrity of the site. In order to address the existing issue of wildlife-vehicle collisions, the Wekiva Parkway will be constructed as an elevated parkway through Lake and Seminole Counties. Currently, two wildlife tunnels exist under SR 46 in east Lake County to provide a total of 78 ft. of safe crossing for area wildlife. The Wekiva Parkway project would replace the tunnels with two wildlife bridges totaling nearly 6,000 ft. in length - more than 76 times the current crossing space. These new bridges will enhance habitat connectivity between the Rock Springs Run State Reserve and the Seminole State Forest. Another 800 ft. long bridge is planned for the Neighborhood Lakes conservation property to allow wildlife to move east / west to and from the Rock Springs Run State Reserve. In addition, the Parkway will replace the existing 561 ft. Wekiva River Bridge with one about 2,150 ft. in length. The project will also realign the portion of CR 46A through the Seminole State Forest to connect to SR 46 further west outside the forest. This will reduce the number of animals harmed by vehicles and provide habitat connectivity within the forest.

3. BENEFICIARIES

Several groups of transportation highway users will benefit from the addition of the Wekiva Parkway. With the Wekiva Parkway, truck traffic will have an alternative route which is anticipated to reduce shipping times and reduce accidents. By creating an efficient roadway network that connects to shipping hubs, Florida will become a stronger candidate for receiving and shipping foreign trade goods. This will become especially vital once the Panama Canal has been improved and opens in 2014. The State is already preparing existing ports to receive larger ships as well as looking into the creation of a network of inland intermodal transfer centers to support this initiative.

Residents and tourists using automobiles will also benefit from the Wekiva Parkway. Local auto users will begin seeing reductions in travel time with the improvements that will be made to Segment 7B, the project's first segment. Once the Wekiva Parkway is completed, traffic congestion is anticipated to further decrease with the option for drivers to choose an alternative route to local roadways or Interstate 4. Similarly, tourists will benefit from the Wekiva Parkway opening with new travel options and faster travel times. By reducing congestion, decreasing travel times, and offering an alternative route option, safety will also increase for all users.

The environment will reap benefits from the Wekiva Parkway. One of the goals of the Parkway is to address the high number of conflicts between vehicles and wildlife. Not only will conflict points be reduced by the design of the Wekiva Parkway, but connections between wildlife habitats will be re-established. Vehicle emissions are also anticipated to drop from the increase of speeds and reduction of travel times.

4. ECONOMICALLY DISTRESSED AREA

As defined by Section 301 of the Public Works and Economic Development Act of 1965, much of Florida has been deemed an Economically Distressed Area. These are areas that have experienced an unemployment rate of at least 1% greater than the national average for the most recent 24-month period for which data is available or the area has a per capita income of 80% or less of the national average. Particularly within the project area, Lake and Orange Counties are identified by the Federal Highway Administration as Economically Distressed--refer to the interactive mapping system available on the FHWA website at:

http://hepgis.fhwa.dot.gov/hepgis_v2/GeneralInfo/Map.aspx

As shown in Figure 5, Wekiva Parkway communities have experienced a higher percentage of unemployment than the national average since 2007. By 2010, the unemployment rate in the three main communities along the Parkway alignment ranged from 1.5 points to 3.1 points above the national average. The drop in employment opportunities has largely been credited to the vast reduction in construction jobs following the housing market crash. Tourism also dropped during the recession which resulted in large lay-offs by major employment centers of the industry such as the theme parks. This, in turn, created the first decline ever experienced on the toll network which stalled programmed projects and impacted local business firms such as transportation engineering, design, and planning companies. Other areas were also impacted by the recession and contributed to the State's unemployment rate for the last three or four years. Table 1 shows the unemployment rate in the project area cities between 2008 and 2010.

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Figure 5: Unemployment Rates for Wekiva Parkway Communities vs. the U.S.

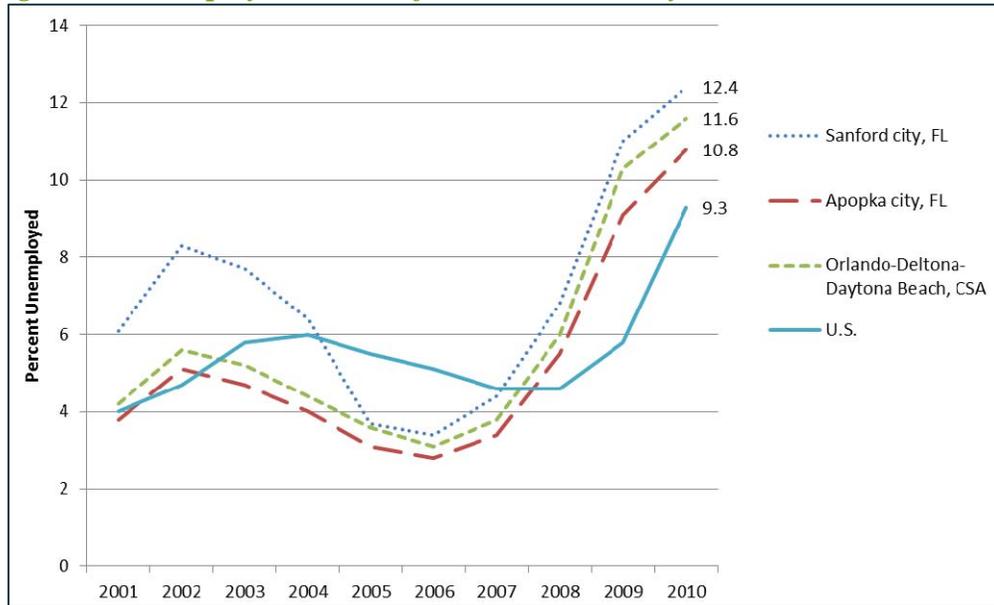


Table 1: Unemployment Rates (%) in Project Area Cities and in Florida

Year	US Unemployment Rate	Unemployment Rates (%) in Project Area Cities and In Florida						
		Florida	Sanford, FL	Difference vs. US	Apopka, FL	Difference vs. US	Orlando-Deltona-Daytona Beach CSA	Difference vs. US
2008	4.6	6.2	6.8	2.2	5.5	0.9	6.0	1.4
2009	5.8	10.2	11.0	5.2	9.1	3.3	10.3	4.5
2010	9.3	11.5	12.4	3.1	10.8	1.5	11.6	2.3

5. PROJECT PARTIES

Recognizing the importance of smart transportation planning to address the current and future demands of the system, FDOT, OOCEA, and Florida’s Turnpike Enterprise have partnered to turn the Wekiva Parkway from an unique implementation strategy to an actual functioning facility. What is unique about this funding partnership is that, while FDOT and Turnpike are public agencies, OOCEA is a private funding partner. Although it functions with its own organizational structure, it should be noted that the Florida’s Turnpike Enterprise was created and established under the FDOT following legislation in 2002. It is considered to be part of the FDOT structure.

6. PROJECT SCHEDULE

The Wekiva Parkway project is broken down into eight segments with construction scheduled to start in July 2012 and complete in September 2019. Segment 7B, a critical supporting segment to the overall project for which TIGER Discretionary Grant funds are being pursued, is scheduled to begin construction in July 2012 and complete construction in March 2014. Figure 6 provides a schedule for Segment 7B, the segment of the Parkway that will be directly funded by TIGER Discretionary Grant funds and, being the first segment to be constructed, ensures that

C. PROJECT ALIGNMENT WITH TIGER DISCRETIONARY GRANT SELECTION CRITERIA

1. PRIMARY SELECTION CRITERIA

a. Long-Term Outcomes

i. State of Good Repair

With funding shortfalls for capacity improvements and aging infrastructure, the need for maintaining the surface transportation assets in a state of good repair has never been greater. The FDOT's 2060 Florida Transportation Plan (FTP), which created a shared vision for the future of transportation in Florida involving all local and regional partners, identified infrastructure preservation as one of the primary goals for all levels of government. The Wekiva Parkway is a critical part of the State's infrastructure planning, having appeared in local planning documents as long as 40 years ago. By diverting traffic from other congested facilities, the proposed project will reduce wear-and-tear of the surrounding transportation network, thereby minimizing the lifecycle costs of the regional transportation network. Additionally, a large portion of the project, the Parkway itself, will generate toll revenue which will minimize the burden on the State to maintain this facility to acceptable physical standards. Although toll revenue is a cost to the user and is not considered a net benefit, it provides a sustainable source of revenue for long-term operations and maintenance of the facility. Also, Segment 7B for which TIGER Discretionary Grant funds are being sought, intends to upgrade an existing facility that, if left unimproved, will threaten future transportation network efficiency, mobility of goods and people, economic growth, and safety conditions.

ii. Economic Competitiveness

The long-term growth in the productivity of the American economy is heavily dependent on the efficiency of the transportation system. The Wekiva Parkway will increase the efficiency of the transportation system through integration and better use of the existing network. This is accomplished by completing the beltway loop around the Orlando metropolitan area. The Wekiva Parkway is anticipated to relieve congestion on the major interstate, Interstate 4, through the center of the region. This will enhance the mobility of people and goods in the Central Florida region, and the overall project will increase the economic productivity of the surrounding properties. This translates to reduced travel times and shipping costs, thereby enhancing the region's economic competitiveness. These travel time savings directly improve the livability for residents and workers along the corridor, and may lead to greater economic growth as the productivity of local shippers increase and the area becomes more attractive to businesses and residents than it otherwise would have been. The benefit-cost analysis conducted for this project estimates 86,524 hours of truck travel time savings over 20 years of operations which represents a monetary benefit of \$507 million (discounted at 7 percent; see Section 3 and Attachment 2 for details).

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This goal will be achieved in an environmentally sustainable manner; aligning with the Regional Policy Plan for smart growth and development, and minimizing impacts to the natural environment. The recommendations presented in the *Wekiva River Basin Coordinating Committee Final Report: Recommendation for Enhanced Land Use Planning Strategies and Development Standards to Protect Water Resources of the Wekiva River Basin*, March 16, 2004 (included in Attachment 1), reflected consensus among state and regional agencies, county and municipal representatives, citizens groups, the agricultural community, property owners, and environmental organizations within the Wekiva Study Area. The recommendations were signed into law on June 29, 2004 as the *Wekiva Parkway and Protection Act* (also included in Attachment 1).

Tables 4 and 5 summarize the freight traffic that moved through the Orlando-Sanford Airport and Port Canaveral in recent years. Both of these freight hubs are located east of the project and have potential to benefit from the Wekiva Parkway and could access the project using the improved Segment 7B. Both of these freight hubs are also included on the Florida SIS and the Federal National Highway System (NHS). With the expansion of the Panama Canal, it is anticipated that cargo shipping and receiving will increase. The Orlando-Sanford International Airport alone has plans for \$62 million worth of expansion projects for the airport partially dependant upon the widening of SR 46 (Segment 7B). Figure 8 shows daily truck trips on the network.

Table 4: Orlando-Sanford Airport Cargo (tons)

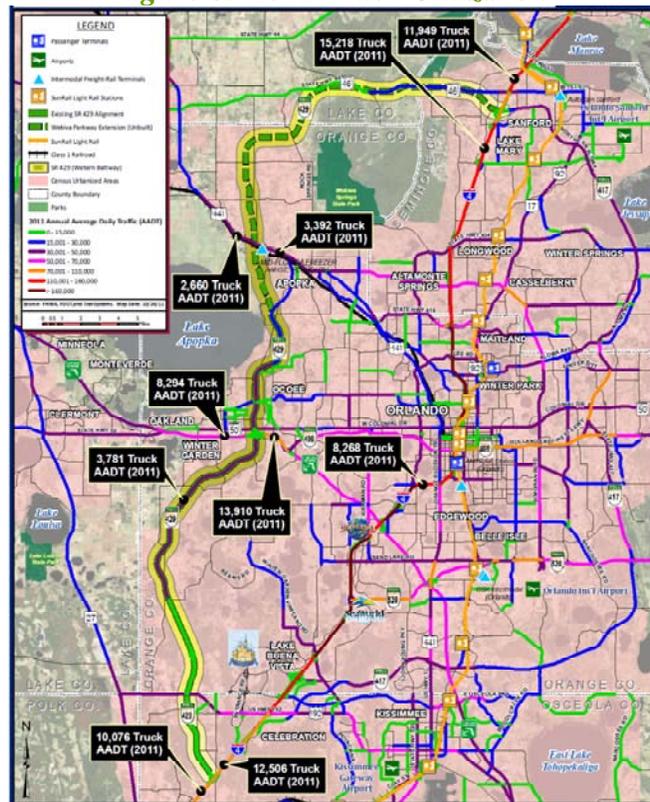
Year	Imports	Exports	Total
2007	3,826	3,670	7,496
2008	2,724	2,646	5,370
2009	1,003	1,212	2,215

Table 5: Port Canaveral Cargo (tons)

Year	Imports	Exports	Total
2008	---	---	3,218,144
2009	---	---	2,626,795
2010	---	---	2,395,779

In addition to improving the long-term efficiency, reliability and cost competitiveness in the movement of workers and goods, the proposed project will generate near-term employment benefits in the surrounding Economically Distressed Area.

Figure 8: 2011 Truck Utilization





iii. Livability

Significant growth in population and employment, along with aging infrastructure, has threatened qualitative measures of community life in Central Florida over the years.

- By the year 2050, Central Florida population is expected to double, reaching approximately 8 million.
- Strong population growth in outlying counties has created additional needs for new expressways to serve the employment base in Orange County.

Congestion is one of the key indicators of quality of life influencing people's location choices and is a growing concern in Florida. Overcrowded highways act as an "inefficiency tax" on our economy, seriously constraining economic growth and impacting quality of life. The following points highlight how the Wekiva Parkway addresses the livability criteria spelled out in the TIGER Discretionary Grant Notice of Funding Availability:

- Reduces regional congestion and provides safe mobility within this region.
- Provides additional, more convenient transportation option by enhancing connectivity to the regional expressway network.
- Reduces congestion on existing facilities and improves access to the metropolitan center as well as other modes of transportation, such as commuter rail.
- Makes goods and services more readily available to the entire population base including seniors, the disadvantaged, and non-drivers.
- Improves connectivity and mobility by enhancing commute choices and connections between residential and commercial areas.
- Includes bicycle / pedestrian enhancements to improve safety and encourage the use of these non-highway modes on arterial segments of the project, such as Segment 7B.
- Consistent with the region's plan of coordinated land use and transportation that resulted from multi-agency, multi-jurisdictional and community partnerships.

Modes of transportation within the Wekiva Parkway corridor are generally limited to personal vehicles and vehicles for hire; however, Transportation Disadvantaged programs provide services to qualifying individuals within the study corridor. Much of the project corridor traverses through rural residential and environmentally sensitive areas; however, the corridor connects the metropolitan areas of Apopka in Orange County, Mount Dora in Lake County, and Sanford in Seminole County. These metropolitan areas have several modes of transportation available, including airports, passenger and freight rail, Park & Ride lots, and Lynx bus service (Orange and Seminole Counties). Additionally, the project will generate public health and air quality benefits by reducing green house gas emissions.

The benefit-cost analysis conducted for this project estimates benefits of more than \$1.5 billion in travel times savings for automobile users in the network due to the completion of the Wekiva Parkway (refer to Section 3 and Attachment 2 for details). These travel time savings would help residents, improving the livability of their communities, as well as the large number of tourists visiting the area annually.

iv. Sustainability



Part of the overall project is to develop a transportation facility that minimizes impacts to the Wekiva Basin Area resources and that specifically improves wildlife habitat connectivity

between conservation lands and reduces vehicle-wildlife conflicts. Figure 9 illustrates the project's location relative to the Ocala National Forest, a nationally significant bear habitat. To minimize impacts, the Parkway is planned to be constructed as a raised roadway and is limited to a maximum number of six interchanges along the entire length of this new facility.

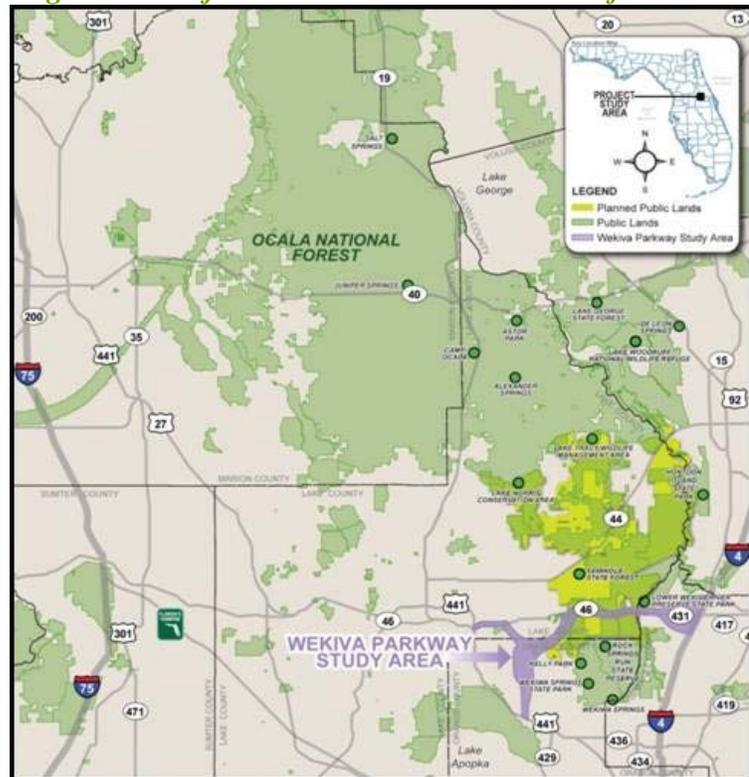
Travel time savings provided by the project will help reduce dependency on oil and will reduce greenhouse gas emissions. The planning and design of the Wekiva Parkway project minimizes the impacts on the environment (air, noise, water, wetlands, endangered species), and greatly improves wildlife habitat connectivity. By reducing traffic congestion, the project results in decreased levels of greenhouse gases emissions and air pollutions, as a result of reduced idling and travel time. The benefit-cost analysis quantified the likely levels of reduction in greenhouse gas emissions and various air pollutants. Using recommended estimates of per-unit societal damage cost of each of these emissions, the analysis revealed \$70 million benefits from reduced emissions over 20 years of operations.

Goals of the overall project include protecting the rural character of the study area and the unique resources of the Wekiva River Basin. The need to complete the Western Beltway, coupled with development pressures on the ecologically sensitive Wekiva River Basin prompted the then Governor to create the Wekiva Basin Area Task Force in September 2002. The *Wekiva Parkway and Protection Act*, Chapter 369, Part III, F.S., allows for building the Wekiva Parkway while protecting the natural resources of the Wekiva River Basin. Chapter 369.321 (1) legislates that “local governments within which the Wekiva Parkway is planned shall amend their local government comprehensive plan to include the Wekiva Parkway.” In addition, local governments hosting an interchange on the Wekiva Parkway must adopt an interchange land use plan to address appropriate land uses and compatible development. The legislation also directs local governments to amend their comprehensive plans to optimize open space and promote development patterns that protect the Most Effective Recharge Areas, karst features, and sensitive natural habitats.

v. Safety

Many of the study area roadways do not meet the current design standards for safety and capacity. That is a major contributing factor in the high crash and fatality rates, especially for SR 46 through Lake and Seminole Counties. According to FDOT Crash Data Reports from 2000

Figure 9: Project Location Relative to Wildlife Habitat

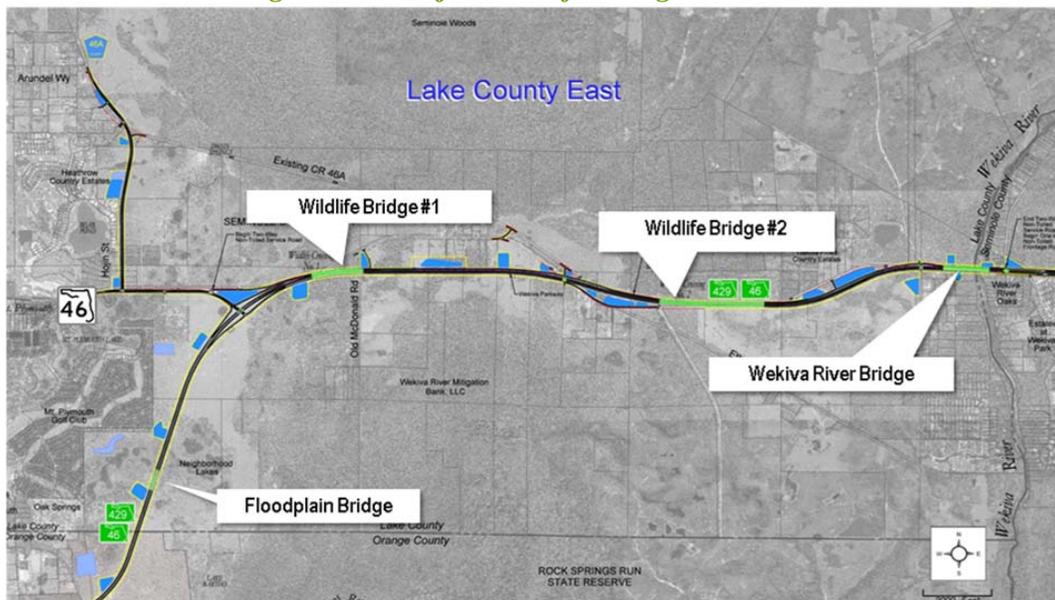


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to 2004, there were 27 fatalities resulting from vehicle crashes on the 18.5 mile segment of SR 46 from US 441 near Mount Dora in Lake County to Interstate 4 near Sanford in Seminole County. FDOT data indicates that in 2004 alone there were 11 fatalities and 117 injuries resulting from 95 vehicle crashes on that section of SR 46. Public awareness of this safety issue has been raised through media attention, such as an *Orlando Sentinel* article on September 28, 2005 which described SR 46 in Lake County as “Central Florida’s Deadliest Road.”. The *Sentinel* stated that, according to their analysis of regional crash data from FDOT and the Florida Highway Patrol, on a per mile basis the section of SR 46 through Lake County is the most dangerous roadway in Central Florida, and the section of SR 46 through Seminole County was described as the region’s second most dangerous roadway. While such media reports are not the basis for decision-making, they clearly indicate a heightened public interest in the need for a safer travel facility in east Lake County and west Seminole County.

An additional safety concern in the study area is vehicle-wildlife conflict. Since much of the study area consists of sparsely populated rural residential areas and large tracts of environmentally sensitive areas, there have historically been many conflicts between vehicles and wildlife on roadways, particularly SR 46 in east Lake County. Over the past 20 years, more than 50 Florida Black Bears, a state-listed threatened species, have been killed by collisions with vehicles on a 6-mile segment of SR 46 adjacent to the state conservation lands. From 1994 to 2005 on that same section of SR 46, 23 bears were killed by vehicles. Two wildlife crossings were constructed along SR 46 (in 1994 and 2004) through the Wekiva River Protection Area in an effort to reduce the high occurrences of vehicle-bear collisions and the bear mortality rate. These crossings will be replaced with the construction of Wekiva Parkway as an elevated parkway as shown in Figure 9. By elevating the Wekiva Parkway, habitats will be re-connected and wildlife will no longer cross over the paved roadway. Additionally, one of the non-tolled portions of this project includes the relocation of CR 46A. A portion of this roadway will be relocated to travel around the Seminole State Forest rather than through it. The Wekiva Parkway project is expected to reduce over 100 crashes annually resulting in \$787 million monetary benefits over 20 years of operations (refer to Section 3 and Attachment 2 for details).

Figure 10: Major Wildlife Bridge Locations



Lastly, the Wekiva Parkway will increase the overall safety for the Orlando urbanized area by diverting trucks carrying hazardous materials and waste away from the densely populated area. Currently these trucks obtain special permits which allow them to travel down Interstate 4 right through Downtown Orlando and the surrounding urbanized area.

b. Job Creation and Near-Term Economic Activity



In addition to the economic benefits associated with long-term outcomes, the short-term economic impacts of the project have been estimated. These impacts represent the direct, indirect, and induced effects associated with expenditures incurred during the development phase of the project (2012-2019) for goods and services produced within the United States (e.g. construction and engineering).

Two methods have been used to estimate expected short-term job creation. The first approach applies the value of one job-year per \$92,000 of government spending as estimated in an analysis by the Council of Economic Advisers (CEA) of job creation resulting from the American Recovery and Reinvestment Act of 2009. The second approach uses the Minnesota IMPLAN Group’s input-output model to estimate the direct, indirect, and induced impacts of the project in terms of employment, labor income, and value added. As shown in Table 6, the project is expected to generate between 13,797 (CEA) and 24,527 (IMPLAN) job-years during the development phase.

Table 6: Job Year Estimates with IMPLAN and CEA Methodology

	Spending (Millions of 2011 Dollars)	Direct	Indirect	Induced	TOTAL
IMPLAN*		9,855	5,349	9,322	24,527
CEA	\$1,269.3		8,830	4,967	13,797

*Note: * Employment impacts from IMPLAN should not be interpreted as full-time equivalent (FTE) as they reflect the mix of full and part time jobs that is typical for each sector.*

The jobs will be created quickly and the project will provide maximum practicable opportunities for small businesses and disadvantaged business enterprises. The FDOT will comply with the Federal Wage Rate requirements of subchapter IV of chapter 31 of title 40, United States Code, as required by the FY 2011 Continuing Appropriations Act. A copy of the Federal Wage Rate Certificate is included in Attachment 3. The project is also expected to create \$1.9 billion in value added, including \$1.3 billion in labor income (IMPLAN estimates). A breakdown of economic impacts in terms of employment, labor income, and value added is provided by quarter in Table 7.

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Table 7: Short-Term Impacts Resulting from Capital Expenditures

Period	Spending (Millions of 2011 Dollars)*	Total Job-Hours**	Direct Job-Hours**	Total Labor Income (Millions of 2011 Dollars)	Total Value Added (Millions of 2011 Dollars)
2012 - Q1	\$5.7	197,561	79,384	\$5.8	\$8.5
2012 - Q2	\$5.7	197,561	79,384	\$5.8	\$8.5
2012 - Q3	\$5.7	197,561	79,384	\$5.8	\$8.5
2012 - Q4	\$5.7	197,561	79,384	\$5.8	\$8.5
2013 - Q1	\$22.5	775,684	311,685	\$22.6	\$33.3
2013 - Q2	\$22.5	775,684	311,685	\$22.6	\$33.3
2013 - Q3	\$22.5	775,684	311,685	\$22.6	\$33.3
2013 - Q4	\$22.5	775,684	311,685	\$22.6	\$33.3
2014 - Q1	\$26.7	918,885	369,226	\$26.8	\$39.5
2014 - Q2	\$26.7	918,885	369,226	\$26.8	\$39.5
2014 - Q3	\$26.7	918,885	369,226	\$26.8	\$39.5
2014 - Q4	\$26.7	918,885	369,226	\$26.8	\$39.5
2015 - Q1	\$56.3	1,939,725	779,420	\$56.5	\$83.3
2015 - Q2	\$56.3	1,939,725	779,420	\$56.5	\$83.3
2015 - Q3	\$56.3	1,939,725	779,420	\$56.5	\$83.3
2015 - Q4	\$56.3	1,939,725	779,420	\$56.5	\$83.3
2016 - Q1	\$102.7	3,537,763	1,421,544	\$103.1	\$151.9
2016 - Q2	\$102.7	3,537,763	1,421,544	\$103.1	\$151.9
2016 - Q3	\$102.7	3,537,763	1,421,544	\$103.1	\$151.9
2016 - Q4	\$102.7	3,537,763	1,421,544	\$103.1	\$151.9
2017 - Q1	\$64.0	2,204,467	885,799	\$64.2	\$94.7
2017 - Q2	\$64.0	2,204,467	885,799	\$64.2	\$94.7
2017 - Q3	\$64.0	2,204,467	885,799	\$64.2	\$94.7
2017 - Q4	\$64.0	2,204,467	885,799	\$64.2	\$94.7
2018 - Q1	\$25.6	882,091	354,442	\$25.7	\$37.9
2018 - Q2	\$25.6	882,091	354,442	\$25.7	\$37.9
2018 - Q3	\$25.6	882,091	354,442	\$25.7	\$37.9
2018 - Q4	\$25.6	882,091	354,442	\$25.7	\$37.9
2019 - Q1	\$13.9	480,317	193,001	\$14.0	\$20.6

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Table 7: Short-Term Impacts Resulting from Capital Expenditures (continued)

Period	Spending (Millions of 2011 Dollars)*	Total Job-Hours**	Direct Job-Hours**	Total Labor Income (Millions of 2011 Dollars)	Total Value Added (Millions of 2011 Dollars)
2019 - Q2	\$13.9	480,317	193,001	\$14.0	\$20.6
2019 - Q3	\$13.9	480,317	193,001	\$14.0	\$20.6
2019 - Q4	\$13.9	480,317	193,001	\$14.0	\$20.6
<i>Total</i>	<i>\$1,269.3</i>	<i>43,745,974</i>	<i>17,578,007</i>	<i>\$1,274.6</i>	<i>\$1,878.9</i>

*Notes: *Includes engineering (\$124.8 million), construction (\$1.1 billion), wetland mitigation (\$17.7 million), and utilities (\$23.1 million); ** Assuming average weekly hours of 34.3 (Bureau of Labor Statistics estimate).*

2. SECONDARY SELECTION CRITERIA

a. Innovation

In July 2003, the Wekiva River Basin Coordinating Committee was created by Executive Order 2003-112. The committee was made up of state and regional agencies, county and municipal representatives, citizens groups, the agricultural community, property owners and environmental organizations within the Wekiva Study Area. The diverse group worked closely together and ultimately voted to recommend building the Wekiva Parkway. The recommendations were signed into law on June 29, 2004 as the *Wekiva Parkway and Protection Act* (also included in Attachment 1). The group’s coordination was unique and the recommendations allowed for the project with protection for the Wekiva River Basin’s fragile environment and promoted innovative planning and development. Innovative planning and development strategies included coordination of land use and water supply planning activities, land use strategies that protect recharge areas, public education and best management practices for water conservation and protection of water quality. The innovative parkway design to help protect area resources is an outcome of this coordination.

Additionally, state-of-the-art technology will be used to manage traffic congestion and streamline toll collection in the corridor. The overall Wekiva Parkway project will utilize ITS technology for fare collection and traffic management to enhance the overall performance of the system, tying into existing communication infrastructure such as vehicle detection devices, electronic tolling, and traveler information on dynamic message signs and 511 telephone service.

b. Partnership

The project represents an important partnership between all of the stakeholders in the project, including public and private entities. As mentioned in the Funding section earlier, the Wekiva Parkway project has received significant funding commitments through a public-private partnership between the FDOT, Florida’s Turnpike Enterprise, and OOCEA.

Jurisdictional and stakeholder collaboration includes state and regional agencies, county and municipal representatives, citizens groups, the agricultural community, property owners, and environmental organizations within the Wekiva Study Area. Disciplinary integration includes partnerships across governmental organizations with similar missions – consistent with state and

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local efforts and plans to promote economic development, revitalize communities, protect and improve the environment, and encourage energy efficiency. Extensive public outreach activities were undertaken during the Project Development and Environment Study (available online at <http://www.expresswayauthority.com/corporate/oursystem/sr429/wekivaparkway.aspx#myAnchor>) to build community consensus and make effective use of community-based organizations in connecting disadvantaged population with economic opportunities. The supporters of this project include, but not limited to, the following -

- OOCEA
- Senator David Simmons
- Department of Economic Opportunity (DEO)
- Florida Department of Environmental Protection (DEP)
- East Central Florida RPC
- Metroplan Orlando (MPO)
- Lake~Sumter MPO
- Orange County
- Seminole County
- Lake County
- City of Apopka
- City of Mount Dora
- City of Sanford

The support letters provided by these stakeholders are included in Attachment 4.

3. RESULTS OF THE BENEFIT-COST ANALYSIS

The Wekiva Parkway Project will generate benefits for all five of the TIGER Discretionary Grant long-term outcomes: State of Good Repair, Economic Competitiveness, Livability, Environmental Sustainability and Safety. These benefits were quantified and monetized annually against the capital and operation and management costs during the construction years and for 20 years of operations (after completion of the final segment) and summed over the lifecycle of the Project. As shown in Table 8, the overall quantified and monetized benefits for the Wekiva Parkway total \$3.0 billion, when discounted at 7 percent. The full project cost, independent of funding source, is used for comparison with total benefits and discounted to the present with the same real discount rate as benefits. Total project costs, including annual operations and maintenance, are \$1.3 billion, discounted at a 7 percent rate. Results from Cost-Benefit Analysis produced Benefit-Cost ratio of 2.3 when using a 7 percent discount rate. The net present value of the project over 20 years is \$1.7 billion, and the internal rate of return is 16%. Results using a 3 percent discount rate, often argued to be more appropriate for public funds, are more favorable (NPV of \$3.9 billion and B/C ratio of 3.5).

Table 8: Summary of Benefit-Cost Analysis

Category	3% Discount Rate	7% Discount Rate
Total Discounted Benefits (\$ millions)	\$5,575	\$2,961
Total Discounted Costs (\$ millions)	\$1,581	\$1,309
Net Present Value (\$ millions)	\$3,994	\$1,651
Benefit / Cost Ratio	3.5	2.3
Internal Rate of Return (%)	16%	

Table 9 presents the estimated benefits of the Wekiva Parkway Project by category and aligned with the TIGER Discretionary Grant desirable long-term outcomes. More than half of the project’s estimated benefits arise from travel time savings for cars, \$1.5 billion over the project

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study period. The Wekiva Parkway will relieve congestion in the study area and generate travel time savings for automobile users, contributing significantly to the livability of the area and local travel for residents and the significant number of tourists who visit the area. Local and regional shippers will also see notable savings, seen here in the monetized travel time savings for trucks in the region, estimated to total \$507 million. Together, the travel time savings for cars and trucks are estimated to total \$2.1 billion, when discounted at 7 percent, which alone are greater than the total discounted cost of the project, before adding the accident savings and reductions in emissions. These travel time savings directly improve the livability for residents and workers along the corridor and may lead to greater economic growth as the productivity of local shippers increase and the area becomes more attractive to businesses and residents than it otherwise would have been.

Table 9: Monetized Benefits by Selection Criterion (\$ Million)

Long-Term Outcomes	Benefit Categories	7% Discount Rate
State of Good Repair	Residual Value	\$52
Economic Competitiveness	Travel Time Savings for Trucks	\$507
	Vehicle Operating Cost Savings	Na
Livability	Travel Time Savings for Autos	\$1,545
Environmental Sustainability	Reductions in Air Emissions	\$70
Safety	Accident Reduction	\$787
Total Benefit Estimates		\$2,961

A similar analysis was conducted for the Wekiva Parkway without Segment 7B to better understand the incremental impact on benefits of including that segment as part of the Wekiva Parkway Project. Segment 7B is the first segment of the Wekiva Parkway scheduled for construction and the requested TIGER funds would be expended immediately on its construction. Segment 7B is expected to yield a 3.0 Benefit/ Cost ratio when discounted at 7 percent rate. The Segment 7B demonstrates independent utility by meeting all the primary and secondary criteria of this discretionary program.

A Benefit -Cost Analysis only presents those costs and benefits which can be measured and monetized. Particularly in an area such as livability, benefits are difficult to measure and should be assumed to be some number in addition to the total presented so that the true ratio of benefits to costs is higher than the reported figures. (For a detailed discussion of the methodology used please see the Benefit-Cost Analysis in Attachment 2, link information provided on last page.)

There is some debate among economists regarding the inclusion of benefits of short-term job creation when calculating the financial metrics noted above. TIGER Discretionary Grant projects will occur during a time of great slack in the labor market, yet there is no guarantee that new jobs are a net benefit. Incorporation of this latter category of benefits will further increase the Benefit-Cost ratio.

D. PROJECT READINESS AND NEPA

Segment 7B, for which the TIGER Discretionary Grant funding is being pursued, is scheduled to start construction in July 2012. The NEPA process is nearly complete with the Environmental Assessment - Finding of No Significant Impact (FONSI) expected by December 2011. The PD&E study and support documents are available online and can be found on the following website:

<http://www.expresswayauthority.com/corporate/oursystem/sr429/wekivaparkway.aspx#myAnchor>.

The TIGER Discretionary Grant funds can be obligated immediately after the discretionary grant is received, well before the September 30, 2013 statutory deadline. The grant funds will be spent steadily and expeditiously once construction starts. The FDOT and the project partners are committed with financial and technical capacities to successfully manage the grant and implement the project.

E. CHANGES IN PRE-APPLICATION

The following corrections should be noted for the pre-application:

- The project name has been slightly modified
- The additional congressional district is Florida 3rd District (not Georgia)

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Attachments for this TIGER Discretionary Grant application can be found on the Florida Department of Transportation website at <http://www.dot.state.fl.us/planning/policy/tigeriii/>. One single consolidated .pdf file contains the following information:

ATTACHMENT 1:

- Project Schedule
- Project Funding/ Cost Estimate by Segment
- Wekiva River Basin Coordinating Committee Final Report: Recommendation for Enhanced Land Use Planning Strategies and Development Standards to Protect Water Resources of the Wekiva River Basin, March 16, 2004
- Wekiva Parkway and Protection Act

ATTACHMENT 2:

- Benefit Cost Analysis and Economic Impact Analysis Report

ATTACHMENT 3:

- Federal Wage Rate Certificate

ATTACHMENT 4:

- Letters of Support

*Orlando-Orange County Expressway Authority
Senator David Simmons
Florida Department of Economic Opportunity (DEO)
Florida Department of Environmental Protection (DEP)
East Central Florida Regional Planning Council
Metroplan Orlando
Lake~Sumter Metropolitan Planning Organization
Orange County
Seminole County
Lake County
City of Apopka
City of Mount Dora
City of Sanford (City Manager and City Mayor)*



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